Multidisciplinary Evaluation of Preschool Children in a Military Psychiatry Clinic: A 10-Year Comparison and a Brief Outcome Study

Bernard J. Lee, MD, COL, MC

A little over a decade ago, the Child and Adolescent Psychiatry Service at Tripler Army Medical Center opened the Child Study Group (CSG), a multidisciplinary diagnostic team clinic for preschool children. The methods and results of the clinic were reported previously (Lee, 1987). The current study is a comparison of the cohort of children seen from January through December 1984 with the parallel group seen from January through June 1994. The paper also presents a brief follow-up study of the children seen in 1994.

Child Study Group

The Child Study Group evaluates all children, ages 5 and under, who are referred to the Child Psychiatry Service. This clinic is free to all eligible dependents of active duty and retired military personnel living in Hawaii. The clinic is scheduled weekly, three mornings every month. The evaluation team consists of a child psychiatrist, a developmental pediatrician, a speech pathologist, an occupational therapist and a social worker. A first-year child psychiatry fellow is assigned to the clinic for a 6-month period. A PGY III psychiatric resident also participates. The children are divided into two groups, those aged 4 and 5, and those who are 3 and younger; in general, there are six to seven children in each group. Once referred, a child is assigned to either a child psychiatrist, a child psychiatry fellow, or a PGY III resident working under staff supervision. In each instance, the assigned professional becomes the primary physician responsible for parent interview, chart-keeping, and follow-up.

The evaluation process then begins with a history taking interview involving one or both parents. After the initial interview, the child is scheduled for the appropriate age group, while the parents meet in a group setting with a social worker to discuss child rearing practices and problems. Before the first CSG meeting, the team meets briefly to discuss the cases scheduled for that morning.

In actual process, evaluation begins in the waiting room where observation are made of the child-parent interaction and separation process. Once the children are introduced to each other and to the staff, we observe how they cope with strange situations and mingle with each other. The children start to play or draw pictures. The team members intermingle and start formal evaluation of the children. The developmental pediatrician tests the children and screens them to determine the need for further evaluation. The occupational therapist tests gross and fine motor coordination using parts of the Denver Developmental Screening Test, Erhardt Test for Prehension Skill, Peabody Motor Development Test, and the Child Observation by Jean Ayres. The speech pathologist listens to the children and, where appropriate, evaluates the child for speech problems using the Peabody Picture Vocabulary Test - Revised, Goldman - Fristol Test for Articulation, and Clinical Evaluation of Language Fundamentals - Preschool (CELF-P). The child psychiatrist, the child psychiatry fellow, and the PGY III resident observe and participate in the children's activities. The social worker conducts the parents group in another room during the time the children are being evaluated in the playroom. In this way all team members assume the roles of observer, participant, evaluator, and therapist.

Through these sessions, we familiarize ourselves with every child in the group in the areas of motor development, language development, adaptive and cognitive development, social behavior, and the emotional aspect of personality development. After each session team members gather to synthesize and to integrate the information each has gathered. At the end of the third session, each child is discussed by the team members; the goal is to formulate diagnoses according to DSM III-R and to offer recommendations, depending upon the needs of each child. Parents are usually seen a week later for a feedback session, at which time the results of the CSG evaluation are shared with them.

The present study compares the children seen at the clinic from January to December of 1984 with the children seen from January to June 1994. In addition the paper will present the result of a brief follow-up of the children seen during the first five months of 1994.

Reprint request to the Author:

Bernard J. Lee, MD, COL, M.C.
Chief, Child and Adolescent Psychiatry Service
Tripler Army Medical Center, Honolulu, Hawaii
96859-5000
Tel (808) 433-6418
Fax (808) 433-4591

Clinical Professor
John A. Burns School of Medicine
University of Hawaii, Honolulu, Hawaii

The opinions and assertions contained herein are the private views of the author and are not in construct as an official or as reflecting the views of the Department of the Army or the Department of Defense. The author expresses his appreciation to all multidisciplinary team members including Dr Wayne Batzer, Dr Albert Saito, Dr Ann Cannard, Dr Aileen Thong, Ed Supplee, PhD., Pauline Mashima, MS,CCC-SLP, Marcia Chur, MS, CCC-SLP, Shari Goo-Yoshino, MS, CCC-SLP, Sandra Kong, OTR, Alan Gamble, ACSW, and SGT Darren Hochstedler, NCOIC, for his assistance in outcome study.

Population and Clinic Demography

The Tripler Child and Adolescent Psychiatry Service is located in Honolulu, Hawaii, and is responsible for the psychiatric care of all military dependents in Hawaii under age 18. The total population of active duty dependents under age 18 is 43,936; 22,435 are males and 21,501 are females. The several branches of the service are represented in the following manner: Army 37%, Navy 36%, Air Force 11%, Marine Corps 14%, and Coast Guard 2%. Officer's children represent about 20% and the children of the enlisted personnel some 80%. (Defense Medical Information System, 1994).

The total number of preschool children referred to the CSG clinic from January through December 1984 was 129; this represented 20% of the all child psychiatric referrals, (641 patients). From January through June 1994, 84 preschool children were referred to the CSG; they comprised some 35% of the all patients evaluated at the clinic during that time (246 patients).

Data Collection

Data for the previous and the current studies were obtained from an Intake form filled out by the parents before the initial interview and from the psychiatric evaluation note in the clinic chart.

The variables selected for these studies included age; sex; sponsor's branch of service and rank; whether the child lives with natural parents, step-parents or other; presenting problems; diagnoses; and recommendations.

Results

Age and Sex

Of the total psychiatric population during the year 1984, 20% were preschool children. Among the pre-school referrals, 60% were boys and 40% were girls (1.5:1 ratio). The age and sex distribution of the preschool children seen in the 1994 CSG is shown in Table 1. The boys represented 66% of the clinic sample and girls 34% (2:1 ratio). The age distribution was fairly similar to the previous study; about 45% of the children were two and three years old and 55% were four and five years old.

Rank and Branch of Services of the Sponsor

In the 1984 clinic sample, the referrals by branch of service were Army 51%, Navy 29%, Air Force 14%, Marine Corps 5% and Coast Guard 2%. The distribution in 1994 was; Army 50%, Navy 34%, Air Force 8%, Marine Corps 5% and Coast Guard 3%.

Eighty-eight percent of the population evaluated in 1984 CSG were children of enlisted parents, and 12% were children of officers. This is very similar to the 1994 CSG population (enlisted 89%, officers 11%). The distribution of rank during the year 1984 and 1994 was Specialist 4 and below (20%, 29%), Sergeant and Staff Sergeant (68%, 53%), Sergeant First Class and above (6%, 7%) and Officers (12%, 11%).

Status of Parents

Among the many variables of family constellation, only one was evaluated in the study; whether the referred child was living with natural parents, stepparents, or other. Seventy-five percent of the children were living with their natural mother and father in both 1984 and 1994 study. There was a slight increase in stepparents from 12% to 18% in 1994. In the 1984 CSG, 10% of children were living with a single, enlisted, active-duty mother. In 1994, 10% of children were living with single active duty parents (5 with an active duty mother and 3 with an active duty father).

Table 1.—Age and Sex Distribution of 1994 CSG Population

Age	Male	Female	Total
2	4	4	38 (45%)
3	20	10	
4	15	6	46 (55%)
5	17	8	
Total	56 (66%)	28 (34%)	84 (100%)

Table 2.—Frequency of Presenting Symptoms Reported by Parents

	Patients/1984 (N=120)	Patients/1994 (N=77)
Difficult to Control/ Oppositional	74 (57%)	59 (77%)
Overactive/hyperactive	25 (20%)	47 (61%)
Aggressive/Destructive/Temper tantrum	54 (42%)	43 (56%)
Delayed Speech Development/Not talking	28 (22%)	36 (47%)
Sad/Unhappy/Anxious/Withdrawn	35 (27%)	31 (40%)
Enuresis	13 (17%)	20 (25%)
Poor Relationship with Peer/Sibling	10 (8%)	19 (25%)
Sleeping Problems	9 (7%)	14 (18%)
Eating Problems	5 (4%)	11 (14%)
Encopresis	6 (5%)	10 (13%)
Lying	4 (3%)	12 (17%)
Cruel to Animals	2 (1.5%)	10 (14%)
Somatic complaints	2 (1.5%)	6 (8%)
Stealing	2 (1.5%)	3 (4%)
Sexual Play	3 (2%)	6 (8%)
Pulling Hair	4 (3%)	0
Running Away	0	2 (2.5%)
Not Talking outside of home	0	1
Fire Setting	0	1

Presenting Problems

Presenting problems in order of frequency in both years are shown in Table 2. In both 1984 and 1994, the cluster of symptoms most frequently reported by the parents concerned behavior problems. However, in 1994 there were a higher percentage of parents complaining of symptoms of disruptive behavior and delayed speech development than in 1984. Also parents had more complaints about their children in 1994 (331 symptoms for 77 children) then in 1984 (276 symptoms for 120 children).

Diagnosis

The different diagnostic categories rendered at the end of the third CSG session in both years are summarized in Table 3. In contrast to the previous study, where the Adjustment Disorder was most frequently diagnosed, in 1994 more children were diagnosed as having Disruptive Behavior Disorder. This category included At-

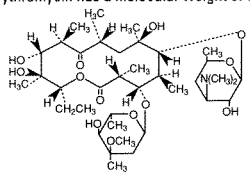
BENZAMYCIN® Topical Gel

(3% erythromycin, 5% benzoyl peroxide)

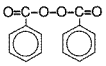
Reconstitute Before Dispensing

Description: Each gram of Benzamycin® (erythromycin— benzoyl peroxide) topical gel contains, as dispensed, 30 mg (3%) active erythromycin and 50 mg (5%) benzoyl peroxide in a gel vehicle of purified water, carbomer 940, alcohol 20%, sodium hydroxide, docusate sodium and fragrance.

Erythromycin ($C_{37}H_{67}NO_{13}$) is produced by a strain of *Streptomyces erythraeus* and belongs to the macrolide group of antibiotics. Erythromycin has a molecular weight of 733.94 and is represented by the following structural formula:



Benzoyl peroxide ($C_{14}H_{10}O_4$) is an antibacterial and keratolytic agent. The structural formula is:



Clinical Pharmacology: Erythromycin is a bacteriostatic macrolide antibiotic, but may be bactericidal in high concentrations. Although the mechanism by which erythromycin acts in reducing inflammatory lesions of acne vulgaris is unknown, it is presumably due to its antibiotic action. Antagonism has been demonstrated between clindamycin and erythromycin.

Benzoyl peroxide is an antibacterial agent which has been shown to be effective against *Propionibacterium acnes*, an anaerobe found in sebaceous follicles and comedones. The antibacterial action of benzoyl peroxide is believed to be due to the release of active oxygen. Benzoyl peroxide has a keratolytic and desquamative effect which may also contribute to its efficacy.

Benzoyl peroxide has been shown to be absorbed by the skin where it is converted to benzoic acid.

Indications and Usage: Benzamycin Topical Gel is indicated for the topical control of acne vulgaris.

Contraindications: Benzamycin Topical Gel is contraindicated in those patients with a history of hypersensitivity to erythromycin, benzoyl peroxide or any of the other listed ingredients.

Precautions: General—For external use only. Not for ophthalmic use. Avoid contact with eyes and mucous membranes. Concomitant topical acne therapy should be used with caution because a possible cumulative irritancy effect may occur, especially with peeling, desquamating or abrasive agents. If severe irritation develops, discontinue use and institute appropriate therapy.

The use of antibiotic agents may be associated with the overgrowth of antibiotic-resistant organisms. If this occurs, administration of this drug should be discontinued and appropriate measures taken.

Information for Patients–Patients using Benzamycin Topical Gel should receive the following information and instructions:

1. Benzamycin Topical Gel is for external use only. Avoid contact with the eyes and mucous membranes.
2. Patient should not use any other topical acne preparation unless otherwise directed by physician.
3. Benzamycin Topical Gel may bleach hair or colored fabric.
4. If excessive irritation or dryness should occur, patient should discontinue medication and consult physician.
5. Discard product after 3 months and obtain fresh material.

Carcinogenesis, Mutagenesis and Impairment of Fertility: Long-term studies in animals have not been performed to evaluate carcinogenic potential or the effect on fertility.

Pregnancy Category C: Animal reproduction studies have not been conducted with Benzamycin® Topical Gel. It is also not known whether Benzamycin Topical Gel can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Benzamycin Topical Gel should be given to a pregnant woman only if clearly needed.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when Benzamycin Topical Gel is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children below the age of 12 have not been established.

Adverse Reactions: Adverse reactions which may occur include dryness, erythema and pruritus. Of a total of 153 patients treated with Benzamycin Topical Gel during clinical trials, 4 patients experienced adverse reactions, of whom three experienced dryness and one an urticarial reaction which responded well to symptomatic treatment.

Dosage and Administration: Benzamycin Topical Gel should be applied twice daily, morning and evening, or as directed by physician, to affected areas after the skin is thoroughly washed, rinsed with warm water and gently patted dry.

How Supplied and Compounding Directions:

Size (Net Weight)	NDC 0066-	Benzoyl Peroxide Gel	Active Erythromycin Powder (In Plastic Vial)	Ethyl Alcohol (70%) To Be Added
23.3 grams (as dispensed)	0510-23	20 grams	0.8 grams	3 mL
46.6 grams (as dispensed)	0510-46	40 grams	1.6 grams	6 mL

Prior to dispensing, tap vial until all powder flows freely. Add the indicated amount of ethyl alcohol (70%) to vial (to the mark) and immediately shake to completely dissolve erythromycin. Add this solution to gel and stir until homogeneous in appearance (1 to 1½ minutes). Benzamycin Topical Gel should then be stored under refrigeration. Do not freeze. Place a 3-month expiration date on the label.

NOTE: *Prior* to reconstitution, store at room temperature. *After* reconstitution, store under refrigeration. Do not freeze. Keep tightly closed. Keep out of the reach of children.

Caution: Federal (U.S.A.) law prohibits dispensing without prescription.

U.S. Patent Nos. 4,387,107 and 4,497,794.

Manufactured by Rhône-Poulenc Rorer Puerto Rico Inc.
Manati, Puerto Rico

For **Dermik Laboratories, Inc.**
A Rhône-Poulenc Rorer Company
Collegeville, PA, U.S.A. 19426 Rev. 3/95 IN-7121L

Reference:

1. Mills OH, Berger RS. A double-blind evaluation of tretinoin alone and in combination with erythromycin/benzoyl peroxide in acne valgaris, *Cutis*. 1992;49(6A):12-15.
2. Leyden JJ, Shalita AR. Rational therapy for acne vulgaris: An update on topical treatment. *J Am Acad Dermatol*. 1986;15:907-915.
3. Shalita AR. Topical tretinoin and combination formulation of topical benzoyl peroxide and erythromycin in the management of acne vulgaris. *Fitzpatrick's Journal of Clinical Dermatology*. 1994, September Supplement: 19-26.

DERMIK LABORATORIES, INC.
Dedicated to Dermatology™

A RHÔNE-POULENC RORER COMPANY DLBDDJA-R

tention Deficit Hyperactivity Disorder (21 boys, 4 girls), Oppositional Defiant Disorder (2 boys, 4 girls), and Conduct Disorder (1 boy, 0 girl). The frequency and sex ratio of both Enuresis and Encopresis remained similar during both eras. The diagnosis Parent-Child Problem was reserved for cases in which the child was free of psychiatric problems, but the parents had parenting difficulties, including child abuse and neglect. About 10% of children had this diagnoses in both study periods. Other diagnoses included Dysthymia (1 boy), Separation Anxiety Disorder (3 boys, 1 girl), Sleep Terror Disorder (1 boy, 1 girl), Elective

Table 3.—Summary of Diagnosis

	1984 (N=129)	1984 (N=77)
Adjustment Disorder	25% 18 boys, 14 girls	17% 8 boys, 5 girls
Disruptive Behavior Disorders	20%	40%
Attention Deficit Hyperactivity Disorder	12 boys	21 boys, 4 girls
Oppositional Defiant Disorder	5 boys, 5 girls	2 boys, 4 girls
Conduct Disorder	4 boys	1 boy
Disorder of Elimination	15%	12%
Enuresis	6 boys, 6 girls	3 boys, 2 girls
Encopresis	5 boys, 1 girl	3 boys, 1 girl
Parent Child Problems	10%	10%
Others	16%	15%
Separation Anxiety Disorder	1 boy, 1 girl	3 boys, 1 girl
Dysthymia	2 boys, 1 girl	1 boy
Sleep Terror Disorder	3 boys, 1 girl	1 boy, 1 girl
Trichotillomania	3 boys, 2 girls	
Elective Mutism		1 girl
Tourette's Disorder		1 boy
Developmental Disorders	18% 13 boys, 7 girls	36% 20 boys, 8 girls
Global Developmental Delay	13%	6%
Pervasive Developmental Disorder	10% 4 boys, 7 girls	9% 5 boys, 2 girls

Table 4.—Recommendation Following the CSG

	In 1984 (N=124)	In 1994 (N=77)
Parent Counseling	50%	60%
Psychopharmacotherapy	10%	25%
Individual Psychotherapy	20%	16%
Group Therapy	15%	10%
Referral to DOE	20%	26%
Referral of the Parent for His/Her own Therapy		7%

Mutism (1 girl), and Tourette's Disorder (1 boy).

About 50% of the children of the 1994 CSG had developmental disorders and received an AXIS II Diagnosis compared to 40% in the 1984 study. The incidence of developmental disorder in 1994 was: Developmental Language Disorder (14 boys, 5 girls), Developmental Articulation Disorder (4 boys, 2 girls), and Developmental Coordination Disorder (2 boys, 1 girl). Global developmental disorder was diagnosed when there were delays in more than one area of development. Mental retardation was also included in this group. In the 1984 CSG, two unexpected findings were the large number of children with pervasive developmental disorder (4 boys, 7 girls) and the prevalence of girls with this disorder. The 1994 CSG also had a large number of children with Pervasive Developmental Disorder (5 boys, 2 girls), with the boys outnumbering the girls.

Recommendations

Table 4 shows the recommendations following the CSG in the two different years. In comparing the groups, a larger number of children were treated with psychopharmacotherapy in 1994. Eighteen children were given Ritalin (eight 3 year old boys, one 3 year old girl; five 4 year old boys, one four year old girl; three 5 year old boys). In addition to Ritalin, one 3 year old boy and two 4 year old boys were given Clonidine. One child with Autistic Disorder was given Haldol. In both years, about 25% of children were referred to the Department of Education for further evaluation and proper class placement.

Table 5.—Presenting Problems at the Time of Evaluation Reported by the Parent at 3 Months Follow-up

		% (N=52)
Difficult to manage/control	12	23%
Hyperactive/Short attention Span	12	23%
Possible ADHD	10	19%
Delayed Speech Development	10	19%
Problem at School/Daycare	4	8%
Poor Relationship with Peers/Sibs	3	6%
Sleep Problems	2	4%
Sexual Molestation	2	4%
Multiple Fears	1	
Wetting Pants	1	
Not Talking in School	1	
Fire Setting	1	
Parents Getting Divorce	1	
Cruelty to Animals	1	
Adjustment to move to Hawaii	1	

Table 6.—Parent's Perception of the Diagnoses at the End of the CSG Compared to the CSG Diagnosis Percentages (N=52)

	Parents Report	The CSG DX
ADHD	18 (34%)	32%
No Diagnosis	13 (25%)	
Developmental Delay	10 (20%)	34%
Adjustment Disorder	5 (10%)	18%
Autistic/PDD	4 (7%)	9%
ODD	2 (4%)	8%
Separation Anxiety Disorder	1	5%
Elective Mutism	1	
Did not finish CSG	4 (7%)	

Brief Follow-up Study

At three months following the completion of the CSG evaluation, the parents of the children evaluated from January to May 1994 CSG were contacted by the clinic Noncommissioned Officers In Charge (NCOIC). The contact was made by phone using a questionnaire.

Questionnaires

1. Presenting problems at the time of evaluation.
2. Parent's perception of the diagnosis at the end of evaluation.
3. Recommendations for the child and/or family after the evaluation.
4. How is the child doing at the present time? Improved____, no change ____, or worse ____.
5. Was the CSG helpful?
6. In what way?

Results

Of 64 children evaluated during the 5 months periods in 1994 , the clinic NCOIC was able to locate 52 parents (80%). Table 5 listed parent's reports of presenting problems at the time of evaluation. About 65% of parents reported symptoms for disruptive behavior disorders (difficult to manage, hyperactive, and possible ADHD). Only 20% of the parents reported delayed speech development. About 8% of parents reported problems at school/day care as the reason for evaluation. The school problem was not listed in the referral presenting problem as it is not included in the Intake Form check list of problems.

Parent's perception of the diagnoses at the end of evaluation are summarized in Table 6. The only diagnosis in which the parent's perception coincide with CSG evaluation was Attention Deficit Hyperactivity Disorder. Other diagnoses including Adjustment Disorder, Developmental Disorder, and Pervasive Developmental Disorder were under-reported when compared to the diagnosis provided at the end of the CSG. Twelve parents (25%) reported that their children did not receive any diagnosis. Of these twelve, 3 had been classified as Adjustment Disorder and 3 did not finish the CSG. Two were referred to the DOE, one with diagnosis of Developmental Language Disorder and the other with Pervasive Developmental Disorder. Two children had parent -child problems with possible abuse. One had provisional Diagnosis of ADHD. Only one child received no diagnosis on both AXIS I and II.

Parent's Report of Recommendation

Thirteen parents (25%) reported that their children were referred

Table 7.—Parents Report of the Recommendation at the End of the CSG Percentage (N=52)

Recommendations	
Medication	13 (25%)
Referred to Special Education Program	13 (25%)
Follow-up at the Clinic	12 (23%)
No needs of Psychiatric follow-up	8 (15%)
No Recommendation	4 (8%)
Referred out (CHAMPUS)	2 (4%)

to the Department of Education for special class placement (Table 7). Another 25% of parents reported that their children were recommended for medication. These figures roughly coincide with the CSG recommendations. Eight parents (15%) felt that their children did not need psychiatric follow-up, and 4 parents (8%) said that they were not told of any recommendation.

Condition of the Child at the Time of Follow-up

For the condition of the child at the time of follow-up, 41 parents (80%) reported improvement, 10 no change, and 1 worsening of the child's behavior or condition. Almost the same number of parents (42) reported the CSG was helpful. Four parents were not sure. Six parents reported that the CSG was not helpful for the following reasons: "Child was misdiagnosed," "Group was too large," "Just wanted medication for the child," and "I did not learn anything which I did not know."

The following answers are the responses of the parents to the questions of "In what way the CSG was helpful?"

No comments from the parents	14 (27%)
Helped them to get into the system (F/U at the clinic, referral to DOE, etc.)	10 (20%)
It was a good evaluation	8 (15%)
Parent group was helpful	7 (14%)
Medication following the evaluation	6 (12%)
Helped the mother understand the problem	5 (10%)
Helped to get his feelings out	1
Gave him an outlet to talk	1
Has made positive change in child	1
Helped to resolve anger and fighting with his brother	1

Discussion

The first 5 years of life are universally accepted to be of profound importance for human emotional development. The paper presents the psychiatric evaluation, demography, and a brief outcome study of preschool children in a military psychiatric clinic. These findings are especially interesting given the similar methodology used in the clinic both 10 years ago, and in the current study.

The present study , when compared to the previous one, showed several clinically relevant findings. The clinic population of the preschool children increased from 20% to 35% in 10 years. Ten years ago, 10% of children evaluated were living with single active duty mother. In the 1994 CSG, about 10% of preschool children were living with single parents; 5 with single active duty mothers and 3 with single active duty fathers. Both in 1984 and 1994 the problem most frequently presented was difficulty in managing the child . However, the 1994 CSG had a greater percentage of children with Disruptive Behavior Disorders than did the 1984 sample (40% vs. 20%). In 1994 CSG, 25 children (32%) had ADHD, and the majority of these children were treated with medication. In 1994 almost 25% of preschool children received a recommendation for psychopharmacotherapy. Some questions are raised by these findings. Did the differences in criteria between DSM III and DSM III-R influence the higher number of ADHD children in the 1994 clinic population, or are we seeing more children with severe behavior problems? In fact, it is our feeling that we are seeing more difficult children than in previous years. There is a recent survey of children's problems which was based on parents' reports for 7 to 16 years old and extended over a 13-year period. The authors reported increased problems and concluded that the American children's problems are getting worse. (Achenbach T.M. & Howell C.T, 1993). It is our impression that our findings of increased behavior problems in preschool children reflect earlier onset and continuity of these difficulties. We would suggest that there may be a change in how we are rearing children. Was our staff more at ease in prescribing medication to the ADHD preschool child than in the previous study year? Why does our clinic continue to find a large number of preschool children with Pervasive Developmental Disorder? The numbers remained constant through the years (About 10% of the CSG population).

The long term follow-up study of military dependents is a rather difficult task. The military family is mobile. The average length of stay for such a family in Hawaii is three years. We were able to contact 80% of the 1994 CSG three months following the completion of evaluation. Compared to the large number of children (50%) who received AXIS II diagnosis (Developmental Language Disorder, Developmental Delay and Pervasive Developmental Disorder), only 27% of parents reported Developmental Disorder at the follow-up. One surprise finding was about 25% for parents reported that their children did not receive any diagnosis. This raises the question of whether we were effective in conveying our findings to the parents. At the three months follow-up, 80% of parents reported that the CSG evaluation and recommendations were helpful, and that their children's condition improved following the CSG evaluation.

In our clinical experience over ten years, evaluating preschool children in a CSG setting was very efficient and time-saving. Developmental, occupational and speech evaluation were all important parts of psychiatric evaluation of preschool children. Almost 50% of the children evaluated had developmental disorders. We feel that the CSG is very cost-effective as an evaluation and intervention methods. The CSG not only offered a comprehensive evaluation for a child but also had a therapeutic effect on both children and their families.

Summary

A useful model for evaluation of preschool children has been presented together with the findings of a brief demographic and outcome study of a group of such children seen at a military child psychiatric clinic during a decade. Early childhood intervention is a young but rapidly growing field. With the passage of the Education of the Handicapped Act Amendment of 1986 (Public Law 99-457), diagnosis and intervention for developmental delay, disability, and/or emotional and behavior problems of infants and toddlers have become a more important aspect of training in the child and adolescent psychiatry residency program. We found that evaluating preschool children and their parents in a group setting was not only possible, economical and effective, but also an excellent vehicle for training.

References

1. Lee. B (1987). Multidisciplinary Evaluation of Preschool Children and Its Demography in a Military Psychiatric Clinic. *J. Am. Acad. Child Adolesc. Psychiatry* 26, 3: 313 - 316.
2. Defense Medical Information System, Resource Analysis and Planning System, 1994
3. American Psychiatric Association (1987), Diagnostic and Statistical Manual of Mental Disorders, (Third Edition - Revised) DSM-III-R
4. Achenbach, T.M. & Howell, CT (1993), Are American Children's Problems Getting Worse? A 13-Year Comparison *J. Am. Acad. Child Adolesc Psychiatry* 1993, 32, 6:1145 - 1154